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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/570,158	03/01/2006	Xavier Roussin-Bouchard	121618	5050

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EXAMINER	
FRIEDHOFER, MICHAEL A	
ART UNIT	PAPER NUMBER
2832	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/570,158	ROUSSIN-BOUCHARD, XAVIER	
	Examiner	Art Unit	
	Michael A. Friedhofer	2832	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-9 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-9 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 3/1/06.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, lines 1-2 the phrases "intended in particular" is both intended use and creates a limitation within a limitation making the claim indefinite and vague.

In claim 1, line 3 the phrase "intended to be actuated" is vague and confusing since it is unclear whether it is not actuated and would the switch then operate.

In claim 1, line 6 "the lower layer" has no antecedent basis.

In claim 1, line 7 "the first" has no antecedent basis since it is unclear what it is the first of.

In claim 1, line 7 "the location" has no antecedent basis.

In claim 1, lines 7-8 it is unclear whether this control button is related to the "at least one control button" already claimed.

In claim 1, line 8 "these two elements" have no antecedent basis.

In claim 1, line 8 "the absence" has no antecedent basis.

In claim 1, line 9 "the operator's finger" has no antecedent basis.

In claim 1, line 11 "this movement" has no antecedent basis.

In claim 1, line 11 "the contact" has no antecedent basis.

In claim 1, lines 11-12 "the lower conducting element" has no antecedent basis.

In claim 2, line 3 "the lower layer" has no antecedent basis.

In claim 3, line 3 "the lower face" has no antecedent basis.

In claim 3, line 4 it is unclear whether this "lower layer" is related to the "at least one lower layer" already claimed.

In claim 3, line 4 replace "this" with –the--.

In claim 3, line 5 "the location" has no antecedent basis.

In claim 3, line 5 "the control button" has no antecedent basis.

In claim 3, line 6 it is unclear whether this "lower conducting element" is related to the lower conducting element already claimed.

In claim 3, lines 6-7 "the button" has no antecedent basis.

In claim 4, lines 2-3 replace "this" with –the outer".

In claim 4, line 3 replace "its" with –an--.

In claim 5, line 2 "the lower layer" has no antecedent basis.

In claim 5, line 3 "the backlighting" has no antecedent basis.

In claim 5, line 3 it is unclear whether this control button is related to the "at least one control button" already claimed.

In claim 6, line 2 it is unclear whether the "several control buttons" are related to the "at least one control button" already claimed.

In claim 6, line 2 "the same lower layer" has no antecedent basis.

In claim 6, line 3 it is unclear whether the "upper layer" is related to the one previously claimed.

In claim 7, lines 1-2 "the number of control buttons" has no antecedent basis.

In claim 7, line 2 "the same lower layer" has no antecedent basis.

In claim 7, line 3 it is unclear whether this upper layer is related to the one previously claimed.

In claim 7, line 3 "the shape" has no antecedent basis.

In claim 7, line 3 "the upper conducting elements" has no antecedent basis.

In claim 7, line 4 "the same shape" has no antecedent basis.

In claim 7, line 4 "the lower conductive elements" has no antecedent basis.

In claim 8, line 2 "the control buttons" has no antecedent basis.

In claim 8, line 3 "the buttons" has no antecedent basis.

In claim 9, line 3 "the location" has no antecedent basis.

In claim 9, line 3 it is unclear whether this control button is related to the one previously claimed.

In claim 9, line 3 replace "this" with –the--.

In claim 9, line 4 "the operating force" and "the button" have no antecedent basis.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 3, 4, and 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gualtieri et al in view of Serizawa et al.

Gualtieri et al discloses in the figures a control lever 10 with a knob 11 delimiting a cavity; and at least one control button 46-52 formed by a keypad 112 for actuation by an operator. The keypad is formed of an elastomeric material. Gualtieri et al does not disclose the specific structure of the at least one control button.

Serizawa et al teaches in the figures a control for use in an automobile including at least one control button 27. The control is formed at least one lower insulation layer 24; an upper layer 22; an intermediate spacer layer 23; lower conducting elements 34; and upper conducting elements 28. The two elements are separated in the absence of pressure from the operator's finger and being able to enter into contact when pressure is transmitted from the operator's finger to the upper layer. The upper layer is deformed transmitting the movement to the upper conducting element so that the two conducting elements close for generating an electric signal in an electric circuit. The upper conducting element is a conductive track made of screen-printing conductive ink on the lower face of the upper layer. An outer layer 112,322 is located on top of the upper layer and may include the graphic on its inner surface. The control buttons share the same upper and lower layers. The number of control buttons would be varied depending on the device to be operated and size/shape of the buttons. The various layers are bonded together. The outer layer is deformed in order to form the blister in the location of the control button in which its size would be determined by the force desired to operate the switch.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gualtieri et al in view of Serizawa et al as applied to claims 1, 3, 4, and 6-9 above, and further in view of Kuratani.

Gualtieri et al as modified by Serizawa et al discloses all of the claimed limitations with the exception of the upper conducting element is a convex deformable cup attached to the lower layer.

Kuratani teaches the use of a conductive dome disk in an automobile switch as the movable conductive element as an alternative to the printing of conductive ink.

It would have been obvious to one of ordinary skill in the art to apply the teachings of Kuratani to Gualtieri et al as modified by Serizawa to form the conductive blister as the conductive disk because the purpose and function would not be altered an the use of a metallic disk would provide a more durable spring element in response to repeated operations.

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gualtieri et al as modified by Serizawa et al as applied to claims 1, 3, 4, and 6-9 above, and further in view of Bartley et al.

Gualtieri et al as modified by Serizawa et al teaches all of the claimed limitations with the exception that a light source is provided in the lower layers allowing the backlighting of at least a portion of the control buttons.

Bartley et al teaches vehicle mounted switches in which the lower layer of the control buttons includes a light source for backlighting at least a portion of the control buttons.

It would have been obvious to one of ordinary skill in the art to apply the teachings of Bartley et al to Gualtieri et al as modified by Serizawa et al to provide backlighting to the control buttons of the control lever because this is for the purpose of illuminating the switch for easier identification and location in a darkened environment so that misoperation is reduced.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Wright, Lauer et al, Armstrong, Spies, and Wang teach various control buttons mounted on a control lever and/or a vehicle.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael A. Friedhofer whose telephone number is 571-272-1992. The examiner can normally be reached on Mon-Fri 6:00 - 2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Michael A. Friedhofer
Primary Examiner
Art Unit 2832

maf